CLAIMS

1. A method in a base station of a wireless data communication system for expediting a request from a mobile unit for uplink resources, the method comprising:

sending by the base station a first request for an acknowledgment message from the mobile unit, the acknowledgment message comprising an uplink channel request when needed by the mobile unit;

determining by the base station an expected time for receiving the acknowledgment message; and

in response to not receiving the acknowledgment message by the expected time, sending by the base station a speculative packet access reject message to the mobile unit, followed by a second request for the acknowledgment message.

2. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when the mobile unit is not actively transmitting uplink data.

3. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when no uplink channel request is queued for the mobile and waiting to be processed.

4. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when the base station is not waiting for the mobile unit to retransmit the uplink channel request, in response to an earlier-sent speculative packet access reject message and second request.

5. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when a maximum number of sequential speculative packet access reject messages allowed during a predefined downlink data flow has not been reached.

6. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when a downlink temporary block flow is one of: operating in a delayed downlink release mode, and operating within a predetermined time of beginning the delayed downlink release mode.

7. The method of claim 1, wherein the sending by the base station the speculative packet access reject message further comprises conditionally sending the speculative packet access reject message only when the mobile unit has subscribed to a Quality of Service (QoS) greater than a predetermined level.

8. An apparatus for use in a base station of a wireless data communication system for expediting a request from a mobile unit for uplink resources, the apparatus comprising:

a transmitter for sending by the base station a first request for an acknowledgment message from the mobile unit, the acknowledgment message comprising an uplink channel request when needed by the mobile unit;

a receiver for receiving the acknowledgment message, and

a processor for controlling the transmitter and the receiver; wherein the processor is programmed to:

determine an expected time for receiving the acknowledgment message; and

in response to not receiving the acknowledgment message by the expected time, conditionally send a speculative packet access reject message to the mobile unit, followed by a second request for the acknowledgment message.

9. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when the mobile unit is not actively transmitting uplink data.

10. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when no uplink channel request is queued for the mobile and waiting to be processed.

11. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when the base station is not waiting for the mobile unit to retransmit the uplink channel request, in response to an earlier-sent speculative packet access reject message and second request.

12. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when a maximum number of sequential speculative packet access reject messages allowed during a predefined downlink data flow has not been reached.

13. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when a downlink temporary block flow is one of:

operating in a delayed downlink release mode, and

operating within a predetermined time of beginning the delayed downlink release mode.

14. The apparatus of claim 8, wherein the processor is programmed to send the speculative packet access reject message only when the mobile unit has subscribed to a Quality of Service (QoS) greater than a predetermined level.

15. A base station in a wireless data communication system for expediting a request from a mobile unit for uplink resources, the base station comprising:

a transmitter to send a first request for an acknowledgment message from the mobile unit, the acknowledgment message able to carry an uplink channel request when needed by the mobile unit;

a receiver to receive the acknowledgment message when provided, and

a processor to control the transmitter and the receiver; wherein the processor is programmed to:

determine an expected time for receiving the acknowledgment message; and

in response to not receiving the acknowledgment message by the expected time, conditionally send a speculative packet access reject message to the mobile unit, followed by a second request for the acknowledgment message.

16. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when the mobile unit is not actively transmitting uplink data.

17. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when no uplink channel request is queued for the mobile and waiting to be processed.

18. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when the base station is not waiting for the mobile unit to retransmit the uplink channel request, in response to an earlier-sent speculative packet access reject message and second request.

19. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when a maximum number of sequential speculative packet access reject messages allowed during a predefined downlink data flow has not been reached.

20. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when a downlink temporary block flow is one of:

operating in a delayed downlink release mode, and

operating within a predetermined time of beginning the delayed downlink release mode.

21. The base station of claim 15, wherein the processor is programmed to send the speculative packet access reject message only when the mobile unit has subscribed to a Quality of Service (QoS) greater than a predetermined level.